

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

**Status of Claims:**

Claims 2, 5 – 7, 9 and 10 were cancelled, without prejudice or disclaimer. Claims 1 and 4 are amended. Features in amended claim 1 is supported by Fig. 1 of the present application. Referring to the figure 1, the normal-conducting metal layer 5 is formed only between the electric insulation layer 4 and the second superconducting layer 6, and not formed at the outer circumference of the second superconducting layer 6. Thus no new matter has been added.

**Claim Objections**

Claim 4 is objected to for informalities. Claim 4 is amended to recite:

The superconducting cable according to claim 3, further comprising wire insulating layers around outer circumferences of the wires. The currently amended claim clarifies and overcomes the informalities noted in the Office Action of July 27, 2007.

**Claim Rejection 35 USC 102**

Claim 1 is rejected under 35 U.S.C. § 102 (b) as being anticipated by Snowden et al. (U.S. Patent No. 3,612,742) (hereinafter Snowden et al.) This rejection is respectfully traversed.

Amended claim 1 recites, among other features,

a normal-conducting metal layer is formed only between said electric insulating layer and said second superconducting layer;

Snowden et al. fails to disclose a normal-conducting metal layer formed only between said electric insulating layer and the second superconducting layer. In particular, Snowden et al. show (Figs. 4 and 5) show each superconductive layer 80 disposed between conductive

layer 82 or between conductive layer 82 and outer conductive layer 72. Accordingly, conductive layers 82 or outer conductive layer 72 are absolutely formed at the outer circumferences of all superconductive layers 80.

The original specification discusses a configuration (Patent Document 3) disclosed in Snowden et al. (Original specification, page 3, lines 3-11 and page 4, lines 5-15). However as stated on page 4 lines 10 to 15 the configuration of Patent Document 3 or Snowden et al. the conductive layer is absolutely formed at the other circumferences of the superconductive layer. In such a structure, currents will flow through the outer conductive layer than the inner superconductor layer, because in the cable core, a more inner layer has greater inductance. As a result of the above phenomenon current flowing through the outer conductive layer will cause significantly large AC losses. (Original specification, page 4, lines 5-10)

Thus, Snowden et al. fail to teach the subject matter recited in claim 1. Therefore claim 1 is believed to be allowable for at least the reasons state above. Claim 3,4 and 8 depend directly or indirectly from claim 1 thus, they are believed to be allowable for at least the same reasons claim 1 is believed to be allowable.

### **Claim Rejection 35 USC 103**

Claims 3 and 4 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Snowden et al. in view of Perez et al. (U.S. Patent Publication No. 2004/0020683) (hereinafter Perez et al.)

Claims 3 and 4 depend directly or indirectly from claim 1. Thus claims 3 and 4 are believed to be allowable for at least the reasons was claim 1 is believed to be allowable.

Neither Snowden et al. nor Perez et al. teach, suggest, motivate or render predictable features of independent claim 1, for example, a normal-conducting metal layer is formed only between said electric insulating layer and said second superconducting layer.

Therefore claims 3 and 4 are believed to be allowable.

**Conclusion:**

After amending the claims as set forth above, claims 1, 3, 4 and 8 are now pending in this application. Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

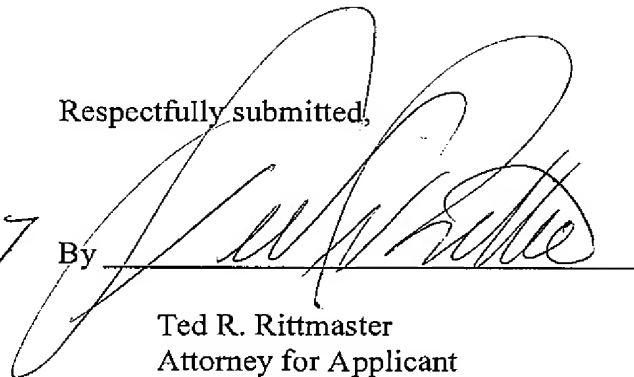
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

October 25, 2007

By



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